Cat. #: 60B606

Description:

NOX4(NADPH oxidase 4) is a constitutive NADPH oxidase which generates superoxide intracellularly upon formation of a complex with CYBA/p22phox. NOX4 regulates signaling cascades probably through phosphatases inhibition. It may function as an oxygen sensor regulating the KCNK3/TASK-1 potassium channel and HIF1A activity. NOX4 may regulate insulin signaling cascade. The protein may play a role in apoptosis, bone resorption and lipolysaccharide-mediated activation of NFKB. Isoform 3 is not functional. Isoform 4 displays an increased activity while isoform 5 and isoform 6 display reduced activity. NOX4 may produce superoxide in the nucleus and play a role in regulating gene expression upon cell stimulation.

Immunogen/Specificity:

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to C-terminal residues of human NOX4 (NADPH oxidase 4)

References

Geiszt, M., et al, Proc. Natl. Acad. Sci. U.S.A. 97 (14), 8010-8014 (2000)

Shiose,A., et al, J. Biol. Chem. 276 (2), 1417-1423 (2001) Goyal,P., et al, Biochem. Biophys. Res. Commun. 329 (1), 32-39 (2005)

Park,H.S., et al, J. Immunol. 173 (6), 3589-3593 (2004) Mahadev,K., et al, Mol. Cell. Biol. 24 (5), 1844-1854 (2004) Pedruzzi,E., et al, Mol. Cell. Biol. 24 (24), 10703-10717 (2004) Maranchie,J.K. and Zhan,Y., Cancer Res. 65 (20), 9190-9193 (2005)

Cucoranu, I., et al, Circ. Res. 97 (9), 900-907 (2005)

Clone Number: Isotype: Species: Human Storage and Stability: at -20oC

Storage buffer:

This antibody is stored in PBS, 0.01% sodium azide and 50% glycerol.

Preparation:

Purified by antigen-specific affinity chromatography.

Applications : ELISA Western Blotting (1µg/ml for 2hrs)